PayMob Solutions

PayMob Payment-on-Delivery Service

Merchant Developers Guide v2.0



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Preface

What Is the Purpose of This Guide

This Merchant Developers Guide highlights the several methods of integration with PayMob's Payment-on-Delivery Service API with the partnered Merchants which allows Merchants to register payment orders to be electronically processed for the Merchant to receive the payment upon delivery. It seeks to guide developers to use the functionality of the Payment-on-Delivery Service API.

The guide also outlines the business logic around the payment processing on PayMob's Payment-on-Delivery Service Servers.

Who Should Read This Guide

PayMob Payment-on-Delivery API provides an easy to use, low integration effort solution for payment enabling web-sites, ecommerce applications, online stores or any equivalent merchant. The solution uses standard web technology allowing merchants to integrate payment capabilities into their online store without installing or configuring any payments software making it suitable for most website hosting environments

This guide is specifically aimed at business analysts and integrators who want to effectively integrate PayMob's Payment-on-Delivery Service into merchant applications, and merchant bank personnel who will be involved with the support of the process.

Where to Get Help

If you need assistance with Payment-on-Delivery Service Guide, please contact your PayMob's account manager, the details of which you will be given once you sign up with PayMob's Payment-on-Delivery Service through your acquiring bank.



Merchant Setup Process

The following table guides you through the basic steps to enable an online store to using PayMob Payment-on-Delivery Service.

```
Step 1:
```

Receive PayMob Admin Panel Credentials from Bank Account Manager

Step 2:

Download the Integration Guide material from the Admin Panel

Step 3:

Obtain your API Key and API Secret Key from the Admin Panel

Step 4:

Design and Implement the Integration

Step 5:

Test your Integration

Step 6:

Go Live

Step 7:

Conduct Pre-Production testing

Step 8:

Begin Live Processing of Payment-on-Delivery Orders



Definitions

API-KEY	Predefined Values that are sent along with the requests to		
API-SECRET-KEY	PayMob servers in order to authenticate the sender server.		
	The values for those keys are available in the API Settings tab		
	of PayMob's Admin Panel.		
REF-1	These values are set by the developer to allow the sender		
REF-2	server to authenticate PayMob Callbacks. These values are		
	sent in the header of each Callback request.		
	These values are set in the API Settings tab of PayMob's		
	Admin Panel.		
Live Host	https://liveapi.paymobsolutions.com		
Test Host	http://test5.paymobsolutions.com		
airway_bill	This parameter servers as a unique identifier to the collector		
	for the order		
merchant_order_id	This parameter serves as a unique identifier to the merchant		
	for the order		



Integration Requests

1. Register Order

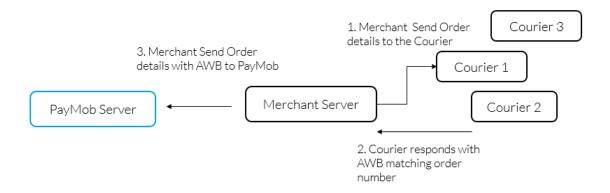


Figure 1 – Data Flow

The below URL is where the merchant registers an order at PayMob

PATH:/api/register_order/

POST Request:

HTTP Header includes:

```
API-KEY: xxxxxxx
API-SECRET-KEY: xxxxxxxx
```

JSON format body:



```
"total_amount": x,
"currency": x,
"order_time": x,
"courier_id": x,
"comments": x,
"expected_payment_method": x,
"customer": {
    "name": x,
    "phone": x,
    "address": x,
    "email": x,
"expiry_time": x,
"expiry_action": x,
"cancel_upon_expiration": x,
"extra_order_type": x,
"in_promo": x,
"promo_code": x,
"extra_x1": x,
"extra_x2": x,
"extra_x3": x,
"extra_x4": x,
"extra_x5": x,
```

Parameter Name	Data Type	Example	Is Required	Comments
merchant_order_id	JSON	{1234: {"amount": x, "extra_order_type": x, "product_info": x}}	True	No restrictions on the id format
merchant_order_id .amount	Float/Integer	123.50	True	
merchant_order_id .extra_order_type	250 CharArray	"Bags category"	False	
merchant_order_id .product_info	250 CharArray	"Apparel"	False	
total_amount	Float/Integer	123.50	True	
currency	Choice Field: EGP /USD	EGP	False	Default: EGP
order_time	Timestamp	1422038585	False	
courier_id	Alphanumeric	MA8213	True	
comments	TextField	"simple comment"	False	
expected_payment_	Choice Field:	CASH	True	



method	CASH/CARD/ MWALLET		
customer.name	250 CharArray	"Bisll White"	True
customer.phone	50 CharArray	"+201005023132"	True
customer.address	250 CharArray	"48, Street 16"	True
customer.email	250 CharArray	client@client.com	True
expiry_time	Timestamp	1422038585	False
expiry_action	ChoiceField: EMAIL/CALL BACK/EMAIL -CALLBACK	EMAIL- CALLBACK	False
cancel_upon_expir ation	Boolean Field	True	False
extra_order_type	250 CharArray	"Bags category"	False
in_promo	Boolean Field	True	False
promo_code	250 CharArray	30%DISCOUNT	False
extra_x1	Reserved	N/A	False
extra_x2	Reserved	N/A	False
extra_x3	Reserved	N/A	False
extra_x4	Reserved	N/A	False
extra_x5	Reserved	N/A	False

PayMob Server Response

```
"paymob_id": x,
"request_status": x,
"qr_code_awb": x,
"airway_bill": x,
```

Parameter Name	Data Type	Example	Is Required	Comments
paymob_id	Integer	41233352	True	
request_status	Choice Field: SUCCESS/ FAILURE	SUCCESS	True	
qr_code_awb	URL Field	https://api.qrserver .com/v1/create-qr- code/?size=150x1 50&data=1234	True	
airway_bill	Alphanumeric		True	



2. Update Order

The below URL is where the merchant update an order at PayMob

PATH:/api/update_order/<awb>

POST Request:

HTTP Header includes:

```
API-KEY: xxxxxxx
API-SECRET-KEY: xxxxxxxx
```

JSON format body:

```
"merchant_order_id": {
       x:{
               "amount": x,
               "extra_order_type": x,
               "product_info": x,
       xy:{
               "amount": x,
               "extra_order_type": x,
               "product info": x,
"total_amount": x,
"courier_id": x,
"expected_payment_method": x,
"expiry_time": x,
"expiry action": x,
"cancel_upon_expiration": x,
"extra_x1": x,
"extra x2": x,
"extra_x3": x,
"extra x4": x,
"extra_x5": x,
```

Parameter Name	Data Type	Example	Is Required	Comments
merchant_order_id	JSON	{1234:	True	No restrictions on
		{"amount": x,		the id format
		"extra_order_type":		
		x, "product_info":		
		x}}		



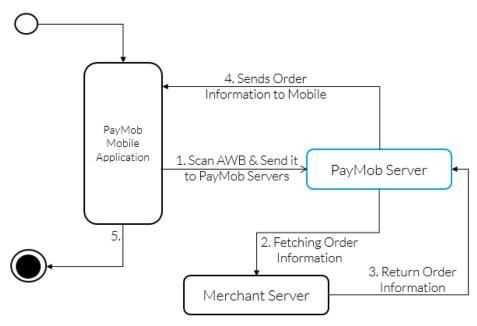
merchant_order_id .amount	Float/Integer	123.50	True
merchant_order_id .extra_order_type	250 CharArray	"Bags category"	False
merchant_order_id .product_info	250 CharArray	"Apparel"	False
total_amount	Float/Integer	123.50	True
courier_id	Alphanumeric	MA8213	True
expected_payment_	Choice Field:	CASH	True
method	CASH/CARD/		
	MWALLET		
expiry_time	Timestamp	1422038585	False
expiry_action	ChoiceField:	EMAIL-	False
	EMAIL/CALL	CALLBACK	
	BACK/EMAIL		
	-CALLBACK		
cancel_upon_expir	Boolean Field	True	False
ation			
extra_x1	Reserved	N/A	False
extra_x2	Reserved	N/A	False
extra_x3	Reserved	N/A	False
extra_x4	Reserved	N/A	False
extra_x5	Reserved	N/A	False

PayMob Server Response

Parameter Name	Data Type	Example	Is Required	Comments
paymob_id	Integer	41233352	True	



wagnest status	Choice Field:	SUCCESS	True	
request_status	SUCCESS/ FAILURE	SUCCESS	True	
merchant_order_id	JSON	{1234: {"amount": x, "extra_order_type" : x, "product_info": x}}	True	No restrictions on the id format
merchant_order_id .amount	Float/Integer	123.50	True	
merchant_order_id .extra_order_type	250 CharArray	"Bags category"	False	
merchant_order_id .product_info	250 CharArray	"Apparel"	False	



2*, 3* are optional depending on the degree of changes in the order details after AWB is generated (Recommended)

Figure 3 – Activity Diagram for Order Retrieval

3. Get Order Information from Merchant (Optional)

This method is to validate the <u>latest order amount</u> during the time of payment (fulfillment).



URL:

THE URL SHALL BE SPECIFIED BY THE ORGANIZATION THROUGH THE ADMIN PANEL

POST Request:

HTTP Header includes:

```
REF-1: xxxxx
REF-2: xxxxx
```

JSON format body:

```
{      "airway_bill": x,
      "attempted_payment_method": x,
      "courier_id": x,
}
```

Parameter Name	Data Type	Example	Is Required Comments
airway_bil	Alphanumeric	B1458F	True
attempted_paymen t_method	ChoiceField CASH/CARD/ MWALLET	CARD	False
courier_id	Alphanumeric	MA813	True

Merchant Server Response on Successful Airway Bill Retrieval:

Parameter Name	Data Type	Example	Is Required	Comments
merchant_order_id	JSON	{1234:	True	No restrictions on



		{"amount": x, "extra_order_type" : x, "product_info": x}}		the id format
merchant_order_id .amount	Float/Integer	123.50	True	
merchant_order_id .extra_order_type	250 CharArray	"Bags category"	False	
merchant_order_id .product_info	250 CharArray	"Apparel"	False	
latest_amount	Float/Integer	123.50	True	
currency	Choice Field: EGP/USD	EGP	False	Default: EGP

Merchant Server Response on Failure in Airway Bill Retrieval:

```
"error_code": x,
"error_message": x,
```

Parameter Name	Data Type	Example	Is Required	Comments
error_code	Choice Field: 0/1/2	1	True	0: Airway_bill does not exist 1: Payment is prohibited for this airway_bill 2: Other problems with the order
error_message	String	"Order does not exist"	False	

4. Delete Order

The below URL is where the collector can delete order:

PATH:/api/delete_order/<courier_id>/<awb>

POST Request:

HTTP Header includes:

API-KEY: xxxxxxx API-SECRET-KEY: xxxxxxxx



JSON format body:

```
NO JSON BODY
   PayMob Server Response
       "request status": x,
       "error_code": x,
```

Parameter Name	Data Type	Example	Is Required	Comments
request_status	Choice Field: SUCCESS/ FAILURE	SUCCESS	True	
error_code	Choice Field: 1/2	1	True	 Order has already been paid Order cannot be deleted for other reasons

5. Cancel Order

The below URL is where the collector can delete order:

PATH:/api/cancel_order/<courier_id>/<awb>

POST Request:

HTTP Header includes:

```
API-KEY: xxxxxxx
API-SECRET-KEY: xxxxxxxx
```

JSON format body:

NO JSON BODY

PayMob Server Response

```
"request_status": x,
"error_code": x,
```

Parameter Name	Data Type	Example	Is Required Comments
request_status	Choice Field:	SUCCESS	True



	SUCCESS/ FAILURE			
error_code	Choice Field: 1/2	1	True	 Order has already been paid Order cannot be deleted for other reasons



CallBack Notifications (Cash/Card)

Important Note:

Upon transaction completion, PayMob server will automatically notify the merchant server about the updated status of the transaction.

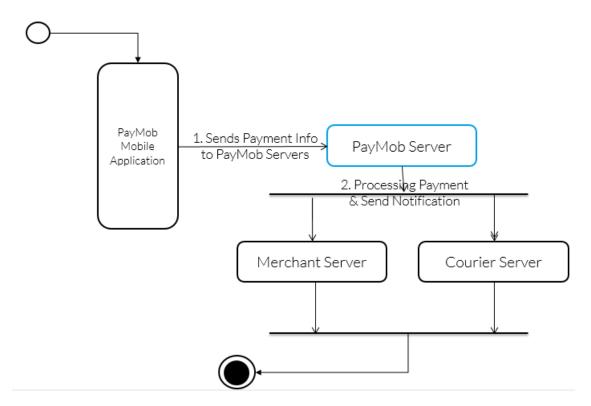


Figure 4 – Payment Notification Activity Diagram

6. Payment Response

PayMob server shall send the following information to the CallBack URL Specified by the Merchant

POST Request:

HTTP Header includes:

REF-1: xxxxxxx REF-2: xxxxxxx

JSON format body:

"request_status": x,



```
"paymob_id": x,
"merchant_order_id": {
           X: {
                    "amount": x,
                    "extra_order_type": x,
                    "product_info": x,
            xy: {
                    "amount": x,
                    "extra_order_type": x,
                    "product_info": x,
"airway_bill": x,
"actual_payment_method": x,
"payment status": x,
"total_amount": x,
"currency": x,
"merchant_id": x,
"courier_id": x,
"order_paid_on": x,
"batch_number": x,
"card_type": x,
"card_num" x,
"in_promo": x.
"promo_code": x,
"transaction_number": x,
"fail_count": x,
"fail reasons": [],
"merchant_callback_retries": x,
```

Parameter Name	Data Type	Example	Is Required	Comments
request_status	ChoiceField: SUCCESS/ FAILURE	SUCCESS	True	
paymob_id	Integer	12314	True	
merchant_order_id	JSON	{1234: {"amount": x, "extra_order_type": x, "product_info": x}}	True	No restrictions on the id format
merchant_order_id. amount	Float/Integer	123.50	True	
merchant_order_id.	250 CharArray	"Bags category"	False	



extra_order_type	250 61 4	// A 110	- 1	
merchant_order_id. product_info	250 CharArray	"Apparel"	False	
airway_bill	Alphanumeric		True	No restrictions on the format
actual_payment_me thod	ChoiceField: CASH/CARD/ MWALLET	CASH	True	
payment_status	ChoiceField: PAID/ UNPAID/ VOID/ CANCELLED	PAID	True	
total_amount	Float/Integer	123.50	True	
currency	Choice Field: EGP/USD	EGP	False	Default: EGP
merchant_id	Alphanumeric	ME4112	True	No restrictions on the format
courier_id	Alphanumeric	MA8213	True	No restrictions on the format
order_paid_on	Timestamp		True	
batch_number	DateField: DD/MM/YYY Y	24/5/2015	False	
card_type	ChoiceField: mastercard/visa	Visa	False	
card_num	Digits	1234	False	Last 4 digits in the payment card number
in_promo	Booelean Field	True	False	
promo_code	250 CharArray	30%DISCOUNT	False	
transaction_number	Integer	4323	True	
fail_count	Integer	5	True	
fail_reasons	List of Error Objects	[{"error_code": 12, "description": "x"}, {"error_code": 1, "description": "x"}]	True	
merchant_callback_ retries	Unsigned Integer	4	True	0 means first attempts, no retries.



Error Object:

error_code	Unsigned integer	12314	True	
error_message	String	"message"	True	

Merchant Server Response

```
{ "ack": "ok" }
```

** If PayMob server does not receive any response, it will attempt to retry every 2 hours within the gap of 2 days until the Merchant server acknowledges the request. If the duration of 2 days has passed, and the Merchant server didn't respond to the Callback notification, PayMob server shall stop sending notification about the status of the non-acknowledged order. However, the Merchant server can check the status of the order afterwards using "Check Order Status"

7. Check Order Status

At any time whenever the merchant wants to check the status of an order.

The below URL is where the merchant can request the order status:

```
PATH:/api/order/awb/<courier id>/<air way bill>
```

POST Request:

HTTP Header includes:

```
API-KEY: xxxxxxx
API-SECRET-KEY: xxxxxxxx
```

JSON format body:

NO JSON BODY

PayMob Server Response



```
"product_info": x,
       xy: {
               "amount": x,
               "extra_order_type": x,
               "product info": x,
"airway_bill": x,
"actual_payment_method": x,
"payment status": x,
"total_amount": x,
"currency": x,
"merchant_id": x,
"order_time": x,
"order paid on": x,
"transaction_number": x,
"expiry_time": x,
"card_type": x,
"card_num": x,
"in promo": x,
"promo_code": x,
"fail_count": x,
"fail reasons": [],
"customer": {
    "name": x,
    "phone": x,
    "address": x,
"comments": x,
"extra_order_type": x,
"extra x1": x,
"extra_x2": x,
"extra x3": x,
"extra_x4": x,
"extra_x5": x,
```

Parameter Name	Data Type	Example	Is Required	Comments
paymob_id	Integer	12314	True	
request_status	Choice Field: SUCCESS/ FAILURE	SUCCESS	True	
merchant_order_id	JSON	{1234 : {"amount": x, "extra_order_type	True	No restrictions on the id format



": x,
merchant_order_id. amountFloat/Integer surversel merchant_order_id. extra_order_type merchant_order_id. product_info250 CharArray "Apparel""Falseairway_billAlphanumeric CASH/CARD/ MWALLETCASHTrue TrueNo restrictions on the formatpayment_statusChoiceField: CASH/CARD/ MWALLETPAID PAID/ UNPAID/ VOID/ CANCELLEDPAID TrueTruetotal_amountFloat/Integer123.50True
amountBags category"Falseextra_order_typeFalsemerchant_order_id. product_info250 CharArray"Apparel"Falseairway_billAlphanumericTrueNo restrictions on the formatactual_payment_me thodChoiceField: CASH/CARD/ MWALLETCASHTruepayment_statusChoiceField: PAID/ UNPAID/ VOID/ CANCELLEDPAIDTruetotal_amountFloat/Integer123.50True
extra_order_typemerchant_order_id. product_info250 CharArray "Apparel"Falseairway_billAlphanumeric ChoiceField: CASH/CARD/ MWALLETTrueNo restrictions on the formatpayment_statusChoiceField: CASH/CARD/ MWALLETPAIDTruepayment_statusChoiceField: PAID/ UNPAID/ VOID/ CANCELLEDPAIDTruetotal_amountFloat/Integer123.50True
merchant_order_id. product_info250 CharArray product_info"Apparel"Falseairway_billAlphanumeric choiceField: CASH/CARD/ MWALLETCASH CASHTrueNo restrictions on the formatpayment_statusChoiceField: NWALLETPAIDTruepayment_statusChoiceField: PAID/ UNPAID/ VOID/ CANCELLEDPAIDTruetotal_amountFloat/Integer123.50True
airway_billAlphanumericTrueNo restrictions on the formatactual_payment_me thodChoiceField: CASH/CARD/ MWALLETCASH/CARD/ MWALLETTruepayment_statusChoiceField: PAID PAID/ UNPAID/ VOID/ CANCELLEDPAID Truetotal_amountFloat/Integer123.50True
actual_payment_me thodChoiceField: CASH/CARD/ MWALLETCASHTruepayment_statusChoiceField: PAID/ UNPAID/ VOID/ CANCELLEDPAIDTruetotal_amountFloat/Integer123.50True
PAID/ UNPAID/ VOID/ CANCELLED total_amount Float/Integer 123.50 True
EGP/USD
merchant_id Alphanumeric MA8213 True
order_time Timestamp False
order_paid_on Timestamp True
transaction_number Integer 4323 True
expiry_time Timestamp 1422038585 False
card_type ChoiceField: Visa False mastercard/visa
card_numDigits1234FalseLast 4 digits in the payment card number
in_promo Booelean Field True False
promo_code Alphanumeric 30%DISCOUNT False
fail_count Integer 5 True
fail_reasons List of Error [{"error_code": True Objects 12, "description":
customer.name 250 CharArray "Ahmed Sayed" True
customer.phone 50 CharArray "+201005023132 True
customer.address 250 CharArray "48, Faisal True Street"



comments	TextField	"simple comment"	False
extra_order_type	250 CharArray	"Bags category"	False
extra_x1	Reserved	N/A	False
extra_x2	Reserved	N/A	False
extra_x3	Reserved	N/A	False
extra_x4	Reserved	N/A	False
extra_x5	Reserved	N/A	False

Error Object:

error_code	Unsigned integer	12314	True	
error_message	String	"message"	True	

8. Update Order Currency Request

This request is for currency conversion when needed by the end customer

URL:

THE URL SHALL BE SPECIFIED BY THE ORGANIZATION THROUGH THE ADMIN PANEL

POST Request:

HTTP Header includes:

```
REF-1: xxxxx
REF-2: xxxxx
```

JSON format body:

```
"airway_bill": x,
"courier_id": x,
"currency": x,
```

Parameter Name	Data Type	Example	Is Required Comments
airway_bil	Alphanumeric	B1458F	True
courier_id	Alphanumeric	MA8213	True
currency	Choice Field:	EGP	True
	EGP/USD		

Merchant Server Response on Successful Airway Bill Retrieval:

```
"merchant_order_id": {
      X: {
              "amount": x,
```



```
"extra_order_type": x,
               "product_info": x,
       xy: {
               "amount": x,
               "extra_order_type": x,
               "product_info": x,
"total_amount": x,
"currency": x,
```

Parameter Name	Data Type	Example	Is Required	Comments
merchant_order_id	JSON	{1234: {"amount": x, "extra_order_type" : x, "product_info": x}}	True	No restrictions on the id format
merchant_order_id .amount	Float/Integer	123.50	True	
merchant_order_id .extra_order_type	250 CharArray	"Bags category"	False	
merchant_order_id .product_info	250 CharArray	"Apparel"	False	
total_amount	Float/Integer	123.50	True	
currency	Choice Field: EGP/USD	EGP	False	Default: EGP

Merchant Server Response on Failure in Airway Bill Retrieval:

```
"error_code": x,
"error_message": x,
```

Parameter Name	Data Type	Example	Is Required	Comments
error_code	Choice Field: 0/1/2	1	True	0: Airway_bill does not exist 1: Payment is prohibited for this airway_bill 2: Other problems
				with the order
error_message	String	"Order does not exist"	False	



Error Handling

Below is the list of all error levels along with a description for what each level represents in addition to the possible message values for each error level.

Error Level	Description	Message Values
Level 0	User Authentication Error	- 'Unidentified User'- 'User is not a Merchant, please consult your access control'
Level 1	HTTP Request Type Error	- 'Expected POST request only'
Level 2	Error: Invalid/Missing Data Type in the parameter of the request	 'Required 'merchant_order_id' field' 'Required 'merchant_order_id' field' 'order_time' must be of type timestamp' 'expected_payment_method' shall have a value of 'CASH' or 'CARD'' 'Customer' information shall be specified. Please refer to the documentation.' 'Customer email should be specified' 'courier_id' parameter must have a value' 'airway_bill' parameter is mandatory'
Level 3	Misconfiguration in the Admin Portal	- 'courier_id' value is not identified. Please consult the admin portal to identify the courier.
Level 4	Logic Error	 'Order with the same merchant order id already been created.' 'Order with the same airway bill and courier already been created.' 'Order Not found' 'Unidentified PATH'
Level 5	Unauthorized Request: Please contact PayMob Support	'courier_id' value is not linked to a courier account''courier_id' is linked to an account that is not verified. Please wait until courier account is verified.'



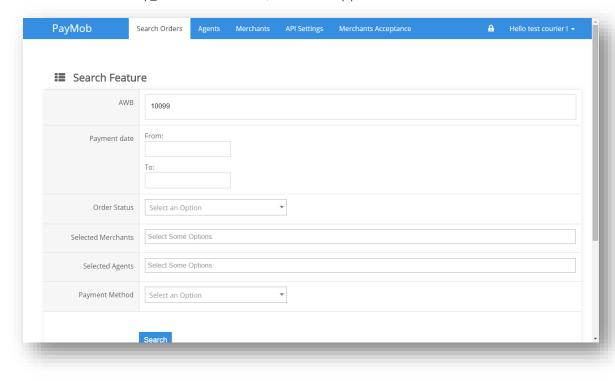
Self-Testing Guide

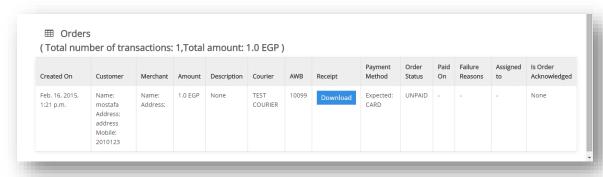
Throughout the integration, developers should use this guide to ensure the correctness the sent and retrieved data from and to PayMob servers.

1. Register Order Testing

Upon sending a successful request to register an order, verification of this order can be done through the Search Order tab on PayMob Admin Panel.

Assume order airway_bill was "10099", it should appear in the search results.

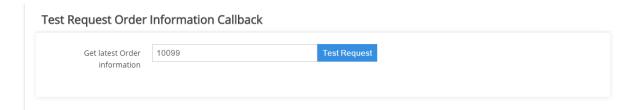






2. Request Order Information Testing

To simulate the Request Order Information, under the Test Request Order Information Callback in the API Settings tab on PayMob Admin Panel, developers are required to enter a registered Airway Bill code and click on Test Request.



3. Payment Notification

To simulate a transaction, under the Test Transaction Notification Callback in the API Setting on PayMob Admin Panel, developers are required to enter a registered Airway Bill code and click on Test Request.

